

CLAIMS

What is claimed is:

1. A system, comprising:

a first device coupled to a transmission medium;

a second device coupled to the transmission medium; and

a remote control unit for controlling the second device, the remote control unit to transmit a data code sequence, the data code sequence recognized by the second device, the data code sequence for the purpose of controlling the second device,

the first device comprising circuitry to generate a representation of the data code sequence if the data code sequence is not recognized by the first device, and to transfer the representation of the data code sequence to the transmission medium to control the second device.

2. The system of claim 1, wherein the first device is coupled to broadcast the representation of the data code sequence on the transmission medium.

3. The system of claim 1, wherein the remote control unit is coupled to transmit the data code sequence on an infrared (IR) carrier.

4. The system of claim 3, wherein the remote control unit is an infrared

(IR) keyboard.

5. The system of claim 4, wherein the remote control unit is personal digital assistant (PDA).

6. The system of claim 1, wherein the representation of the data code sequence is measurement of data code sequence waveform.

7. The system of claim 1, wherein the transmission medium is compatible with a wired or wireless protocol.

8. The system of claim 7, wherein the transmission medium is an IEEE 1394 Serial Bus.

9. The system of claim 7, wherein the transmission medium is compatible with an Ethernet protocol.

10. The system of claim 7, wherein the transmission medium is twisted pair.

11. The system of claim 1, wherein the first device is to include the representation of the data code sequence in an audio-video control (Function

Control Protocol (AV/C FCP) packet and to transmit the FCP packet having the representation of the data code sequence to the second device only.

12. The system of claim 1, wherein the first device is to include the representation of the data code sequence in a Function Control Protocol (FCP) packet and broadcast the FCP packet having the representation of the data code sequence on the transmission medium to all devices on the network.

13. The system of claim 1, wherein the first and second devices are audio/video devices.

14. A method, comprising:

receiving at a first device a data code sequence from a remote control unit, the data code sequence recognized by the second device for controlling the second device;

generating a representation of the data code sequence using the if the data code sequence is not recognized by the first device; and

transferring the representation of the data code sequence onto a transmission medium to control the second device.

15. The method of claim 14, further comprising transferring the data code sequence on a modulated carrier.

16. The method of claim 15, further comprising demodulating the modulated carrier.

17. The method of claim 14, further comprising including the representation of the data code sequence in a audio-video control Function Control Protocol (AV/C FCP) packet and broadcasting the FCP packet having the representation of the data code sequence on the transmission medium.

18. The method of claim 14, further comprising including the representation of the data code sequence in a Function Control Protocol (FCP) packet and addressing the FCP packet having the representation of the data code sequence to the second device only.

19. A system, comprising:

a first device coupled to a transmission medium;

a second device coupled to the transmission medium;

a remote control unit for controlling a third device, the remote control unit to transmit a data code sequence, the data code sequence recognized by and for controlling the third device,

the first device comprising circuitry to measure the data code sequence, to generate a representation of the data code sequence from measurements, and to transfer the representation of the data code sequence to the transmission medium,

the second device comprising circuitry to translate the representation of the data code sequence back to the data code sequence and to transfer the data code sequence to the third device to control the third device.

20. The system of claim 19, wherein the remote control unit is an infrared (IR) keyboard.

21. The system of claim 20, wherein the first and third devices are audio/video devices.

22. An apparatus, comprising:

an optical receiver;

a demodulator in communication with the optical receiver, the demodulator to demodulate an optical signal provided by the optical receiver and to recover a data code sequence from the optical signal;

a processor in communication with the demodulator, the processor to sample the data code sequence and to generate a representation of the data code sequence from samples;

a buffer in communication with the processor, the buffer to buffer the representation of the data code sequence to maintain a continuous transmission of the representation of the data code sequence to an input/output (I/O) interface; and

an I/O interface in communication with the buffer, the I/O interface to receive the representation of the data code sequence and to convert the representation of the data code sequence into a format compatible with electrical characteristics of a transmission medium.

23. The apparatus of claim 22, wherein the processor is further to sample binary data bits in a message/command in the data code sequence.

24. The apparatus of claim 22, wherein the demodulator is further to remove an amplitude modulated carrier having a frequency in a range of typically thirty kilohertz (kHz) to sixty kHz, or a narrower range, to recover the data code sequence.

25. The apparatus of claim 24, wherein the processor is further to generate the representation of the data code sequence in the form of a list of the samples.

26. The apparatus of claim 24, wherein the I/O interface is further to insert a representation of the data code sequence in an Internet protocol (IP) packet.